

IN THE CLAIMS

Amend claims 1-4, 6-12 and 14-15 and add new claims 25-27  
as follows:

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A3 1. (Currently Amended) A storage subsystem comprising a plurality of storage devices connected to a host computer, wherein

a first storage device included in said plurality of storage devices comprises:

means for receiving a request for information processing for said storage subsystem, said information processing being executed in said host computer;

means for transferring the received request to a second storage device included in said plurality of storage devices; and

means for executing information processing indicated by the received request when the received request should be executed by said first storage device based on cooperation control information which indicates a request to be executed by the first storage device,

wherein each of the plurality of storage devices control RAID level cooperatively.

2. (Currently Amended) The storage subsystem according to claim 1, ~~wherein said means for executing information~~

A3 ~~processing executes the information processing when it is~~  
~~judged that the received request should be executed, based on~~  
~~cooperation control information which indicates a request to~~  
~~be executed by said first storage device, and the received~~  
~~request wherein the first and second storage devices control~~  
RAID level 1, and

wherein if the request is a data write request, the  
second storage device requests the first storage device to  
send stored data connection with the data write request to the  
second storage device and stores data sent from the first  
storage device.

3. (Currently Amended) The storage subsystem according to  
claim 2, wherein

the request includes first identification  
information indicating an address of a memory area made from  
the plurality of a storage devices that should be executed by  
the information processing, and the cooperation control  
information includes second ~~identification~~ information  
identifying an area of said first storage device of the memory  
area of the plurality of storage devices; and

said means for executing information processing  
executes the information processing when the first  
~~identification~~ information and the second ~~identification~~  
information match.

A3 4. (Currently Amended) The storage subsystem according to claim 1, wherein

said second storage device comprises:

means for receiving the transferred request; and

means for executing information processing indicated by the transferred request when the transferred request should be executed by said second storage device based on the cooperation control information which indicates a request to be executed by said second storage device,

wherein the first and second storage device control RAID level 4 or 5,

wherein, if the request is a data write request, the first storage device receives data connection with the data write request, stores the data, makes another data to be used for making parity data in the second storage device and sends the another data to be second storage device,

wherein the second storage device received the another data, makes parity data based on the another data, and stores the parity data.

5. (Original) The storage subsystem according to claim 4, wherein

in said first storage device, said means for transferring a request adds information, which indicates said

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first storage device, to the request to be transferred; and  
said second storage device further comprises means  
for suppressing another transfer of the transferred request  
based on the added information that indicates said first  
storage device.

6. (Currently Amended) The storage subsystem according to  
claim 1, further comprising a third storage device of the  
plurality of storage devices which connected to the second  
storage device, wherein said means for transferring a request  
transfers the received request to said second storage device  
when it is judged that the received request should not be  
executed, based on cooperation control information which  
indicates a request to be executed by said first storage  
device, and the received request wherein the first, second and  
third storage devices control RAID level 4 or 5,

wherein, if the request is a data write request, the  
first storage device receives data connection with the data  
write request and stores the data, makes another data to be  
used for making parity data in the third storage device and  
sends the another data to the second storage device,

the second storage device receives the another data,  
makes second another data to be used for making parity data in  
the third storage device and sends the another data and second  
another data to the third storage device,

A3 wherein the third storage device receives the  
another data and the second another data, makes parity data  
based on the another data and the second another data, and  
stores the parity data.

7. (Currently Amended) The storage subsystem according to claim 61, wherein said means for transferring a request transfers the received request to said second storage device when it is judged that said second storage device should execute the received request,

wherein, if the request is a data read request, the  
first storage device receives the data read request, reads  
first data requested by the data read request, and sends the  
first data to the second storage device,

the second storage device receives the first data  
and the data read request, reads second data requested by the  
data read request, merges the first and second data and sends  
the merged data to the host computer, ~~based on cooperation~~  
~~control information which indicates a request to be executed~~  
~~by said first storage device, and the received request.~~

8. (Currently Amended) The storage subsystem according to claim 7, wherein

the request includes first ~~identification~~  
information indicating an address of a memory area made from

A3 the plurality of a-storage devices that should be executed by the information processing, and the cooperation control information includes second ~~identification~~-information identifying an area of said first storage device of the memory area of the plurality of storage devices; and

said means for executing information processing executes the information processing when the first ~~identification~~-information and the second ~~identification~~ information match.

9. (Currently Amended) A storage subsystem comprising a plurality of storage devices connected to a host computer, wherein

a first storage device included in said plurality of storage devices comprises:

a receiver connected to the host computer, for receiving a request for information processing for said storage subsystem, ~~said information processing being executed in said host computer~~;

a transceiver connected to said receiver and a second storage device included in the plurality of storage devices, for transferring the received request to the second storage device; and

a processor for executing the information processing indicated by the received request when the received request

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should be executed by said first storage device based on cooperation control information which indicates a request to be executed,

wherein each of the plurality of storage devices control RAID level cooperatively.

10. (Currently Amended) The storage subsystem according to claim 9, ~~wherein said processor executes the information processing when it is judged that the received request should be executed, based on cooperation control information which indicates a request to be executed by said first storage device, and the received request~~wherein the first and second storage devices control RAID level 1,

wherein if the request is a data write request, the first and second storage device receives data connection with the data write request and stores data sent from the host computer synchronously.

11. (Currently Amended) The storage subsystem according to claim 10, wherein

the request includes first ~~identification~~ information indicating an address of a memory area made from the plurality of a storage devices that should be executed by the information processing, and the cooperation control information includes second ~~identification~~ information

A3 identifying an area of said first storage device of the memory area of the plurality of storage devices; and

said processor executes the information processing when the first ~~identification~~-information and the second ~~identification~~-information match.

12. (Currently Amended) The storage subsystem according to claim 9, further comprising a third storage device included in the plurality of the storage devices which connected to the second storage device, wherein

said ~~second~~-third storage device comprises:

a second receiver connected to said transceiver for receiving the transferred request; and

a second processor connected to said second receiver for executing the information processing indicated by the transferred request when the transferred request should be executed by said ~~second~~-third storage device based on the cooperation control information which indicates a request to be executed,

wherein the first, second and third storage devices control RAID level 4 or 5,

wherein if the request is a data write request and the second storage device fails, the first storage device receives data connection with the data write request, stores the data, makes another data to be used for making parity data



A3 in the third storage device and sends the another data to the third storage device,

wherein the third storage device receives the another data, makes parity data based on the another data, and stores the parity data.

13. (Original) The storage subsystem according to claim 12, wherein

in said first storage device, said transceiver adds information, which indicates said first storage device, to the request to be transferred; and

said second processor suppresses another transfer of the transferred request based on the added information that indicates said first storage device.

14. (Currently Amended) The storage subsystem according to claim 9, further comprising a third storage device of the plurality of storage devices which are connected to the second storage device,~~wherein said transceiver transfers the received request to said second storage device when it is judged that the received request should not be executed, based on cooperation control information indicating a request to be executed by said first storage device, and the received request wherein, if the request is a data write request, the first storage device receives data connection with the data~~

A3 write request, stores the data, makes another data to be used  
for making parity data in the third storage device and sends  
the another data to the second storage device,

the second storage device receives the another data  
makes second another data to be used for making parity data in  
the third storage device and sends the another data and the  
second another data to the third storage device,

wherein the third storage device receives the  
another data and the second another data, makes parity data  
based on the another data and the second another data, and  
stores the parity data.

15. (Currently Amended) The storage subsystem according to claim 914, wherein said transceiver transfers the received request to said second storage device when it is judged that said second storage device should execute the received request, based on cooperation control information indicating a request to be executed by said first storage device, and the received request,

wherein, if the request is a data read request and  
the second storage device fails, the first storage device  
receives the data read request, reads first data requested by  
the data read request and sends the first data to the third  
storage device,

the third storage device receives the first data and

A3 the data read request, reads parity data connection with the data read request, constructs second data stored in the second storage devices based on the parity data, merges the first and second data and sends the merged data to the host computer.

16. (Currently Amended) The storage subsystem according to claim 15, wherein

the request includes first ~~identification~~ information indicating an address of a memory area made from the plurality of a storage devices that should be executed by ~~execute~~ the information processing, and the cooperation control information includes second ~~identification~~ information identifying an area of said first storage device of the memory area of the plurality of storage devices; and

said processor executes the information processing when the first ~~identification~~ information and the second ~~identification~~ information match.

17. (Original) A storage control method which uses a storage subsystem comprising a plurality of storage devices connected to a host computer and includes a first storage device, wherein

said first storage device executes:

a step of receiving a request for information processing for said storage subsystem, said information

processing being executed in said host computer;

A3 a step of transferring the received request to a second storage device included in said plurality of storage devices; and

a step of executing information processing indicated by the received request when the received request should be executed by said first storage device based on cooperation control information which indicates a request to be executed by the the first storage device,

wherein each of the plurality of storage devices control RAID level cooperatively.

18. (Currently Amended) The storage control method according to claim 17, ~~wherein said step of executing information processing executes the information processing when it is judged that the received request should be executed, based on cooperation control information indicating a request to be executed by said first storage device, and the received request~~ the first and second storage devices control RAID level 1, and

wherein if the request is a data write request, the second storage device requests the first storage device to send stored data connection with the data write request to the second storage device and stores data sent from the first storage device.

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19. (Currently Amended) The storage control method according to claim 17, wherein

the request includes first ~~identification~~ information indicating an address of a memory area made from the plurality of a storage devices that should be executed by ~~execute~~ the information processing, and the cooperation control information includes second ~~identification~~ information identifying an area of said first storage device of the memory area of the plurality of storage devices; and

said step of executing information processing executes the information processing when the first ~~identification~~ information and the second ~~identification~~ information match.

20. (Original) The storage control method according to claim 17, wherein

said second storage device executes:

a step of receiving the transferred request; and

a step of executing information processing indicated by the transferred request when the transferred request should be executed by said second storage device based on the cooperation control information which indicates a request to be executed by said second storage device,

wherein the first and second storage device control

RAID level 4 or 5,

A3 wherein, if the request is a data write request, the first storage device receives data connection with the data write request, stores the data, makes another data to be used for making parity data in the second storage device and sends the another data to be second storage device,

wherein the second storage device received the another data, makes parity data based on the another data, and stores the parity data.

21. (Original) The storage control method according to claim 20, wherein

in said first storage device, said step of transferring a request adds information, which indicates said first storage device, to the request to be transferred; and

said second storage device further executes a step of suppressing another transfer of the transferred request based on the added information that indicates said first storage device.

22. (Currently Amended) The storage control method according to claim 17, further comprising a third storage device of the plurality of storage devices which connected to the second storage device,~~wherein said step of transferring the request transfers the received request to said second storage device~~

A3 ~~when it is judged that the received request should not be executed, based on cooperation control information indicating a request to be executed by said first storage device, and the received request wherein the first, second and third storage devices control RAID level 4 or 5,~~

wherein, if the request is a data write request, the first storage device receives data connection with the data write request and stores the data, makes another data to be used for making parity data in the third storage device and sends the another data to the second storage device,

the second storage device receives the another data, makes second another data to be used for making parity data in the third storage device and sends the another data and second another data to the third storage device,

wherein the third storage device receives the another data and the second another data, makes parity data based on the another data and the second another data, and stores the parity data.

23. (Currently Amended) The storage control method according to claim 17, ~~wherein said step of transferring the request transfers the received request to said second storage device when it is judged that said second storage device should execute the received request, based on cooperation control information indicating a request to be executed by said~~

A3 ~~first~~second storage device, and the received request wherein the first, second and third storage devices control RAID level 4 or 5,

wherein, if the request is a data write request, the first storage device receives data connection with the data write request and stores the data, makes another data to be used for making parity data in the third storage device and sends the another data to the second storage device,

the second storage device receives the another data, makes second another data to be used for making parity data in the third storage device and sends the another data and second another data to the third storage device,

wherein the third storage device receives the another data and the second another data, makes parity data based on the another data and the second another data, and stores the parity data.

24. (Currently Amended) The storage control method according to claim 23, wherein

the request includes first ~~identification~~ information indicating an address of a memory area made from the plurality of a-storage devices that should be executed by ~~execute~~ the information processing, and the cooperation control information includes ~~second identification~~ information identifying an area of said first storage device of the memory



area of the plurality of storage devices; and

A3        said step of executing information processing  
executes the information processing when the first  
~~identification~~ information and the second ~~identification~~  
information match.

25. (New) A storage subsystem comprising a plurality of  
storage devices connected to a host computer, wherein:

      a first storage device included in said plurality of  
storage devices comprises:

          means for receiving a request for information  
processing for said storage subsystem, said information  
processing being executed in said host computer;

          means for transferring the received request to a  
second storage device included in said plurality of storage  
devices;

          means for executing information processing indicated  
by the received request when the received request should be  
executed by said first storage device;

          said second storage device comprises:

          means for receiving the transferred request; and

          means for executing information processing indicated  
by the transferred request when the transferred request should  
be executed by said second storage device;

          in said first storage device, said means for  
transferring a request adds information, which indicates said

first storage device, to the request to be transferred; and

A3           said second storage device further comprises means for suppressing another transfer of the transferred request based on the added information that indicates said first storage device.

26. (New) A storage subsystem comprising a plurality of storage devices connected to a host computer, wherein:

          a first storage device included in said plurality of storage devices comprises:

          a receiver connected to the host computer, for receiving a request for information processing for said storage subsystem, said information processing being executed in said host computer;

          a transceiver connected to said receiver and a second storage device included in the plurality of storage devices, for transferring the received request to the second storage device; and

          a processor for executing the information processing indicated by the received request when the received request should be executed by said first storage device;

          said second storage device comprises:

          a second receiver connected to said transceiver for

receiving the transferred request; and

A3           a second processor connected to said second receiver for executing the information processing indicated by the transferred request when the transferred request should be executed by said second storage device;

          in said first storage device, said transceiver adds information, which indicates said first storage device, to the request to be transferred; and

          said second processor suppresses another transfer of the transferred request based on the added information that indicates said first storage device.

27. New) A storage control method which uses a storage subsystem comprising a plurality of storage devices connected to a host computer and includes a first storage device, wherein

          said first storage device executes:

          a step of receiving a request for information processing for said storage subsystem, said information processing being executed in said host computer;

          a step of transferring the received request to a second storage device included in said plurality of storage devices; and

          a step of executing information processing indicated

AB by the received request when the received request should be executed by said first storage device;

said second storage device executes:

a step of receiving the transferred request; and

a step of executing information processing indicated by the transferred request when the transferred request should be executed by said second storage device;

in said first storage device, said step of transferring a request adds information, which indicates said first storage device, to the request to be transferred; and

said second storage device further executes a step of suppressing another transfer of the transferred request based on the added information that indicates said first storage device.